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The Calculus on Measure Chains

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Oral Presentation 3.1

THE CALCULUS ON MEASURE CHAINS

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In this presentation a new calculus will be explicated. Developed by Bernd Aulbach and Stefan Hilger, this calculus is on measure chains, which are time scales (subsets of the real line) with certain basic restrictions. This calculus provides a unified approach which encompasses both discrete and continuous cases, as well as all cases possessing some combination of continuous and discrete intervals. Some fundamental theoretical results will be given, including an induction principle for measure chains.